1. What is a Linux?

Ans: - Linux is an open-source operating system that is made up of the kernel, the base component of the OS, and the tools, apps, and services bundled along with it.

2. What is difference between Hard Link and Soft Link?

Ans: - A hard link always points a filename to data on a storage device. A soft link always points a filename to another filename, which then points to information on a storage device.

3. What is a Kernal in Linux?

Ans: - The Linux kernel is the core of the Linux operating system and acts as an interface between the computer hardware and its process.

4. How do you create a user account?

Ans: - We can create a new user account by using the useradd or adduser command followed by the username.

5. What is the 'grep' command used for in Linux?

Ans: - The grep command in Linux used to search for specific patterns within files or output form other commands.

6. Step1: Create user p1 Step2: He should be part of 3 groups g1,g2,g3. Step3: whenever he creates a file automatically in the group section of file grp g1 should come.

Ans: -   1. mkdir ~/p1

2. mkdir ~/groups/g1 ~/groups/g2 ~/groups/g3

3. chmod 770 ~/groups/g1 ~/groups/g2 ~/groups/g3

4. chgrp g1 ~/p1

5. chmod g+s ~/p1

7. Step1: Create directory /tmp/bg as root user and create files inside it. Step2: "abhi" should be the owner of the directory. He should be able to create files and delete files inside the directory and also he should be able to add content to all files inside the directory

Ans: -   1. Cd ~

2. mkdir /tmp/bg

3. touch /tmp/bg/file1.txt /tmp/bg/file2.txt

4. chown -R abhi /tmp/bg

5. chmod u+rwx /tmp/bg

6. chmod -R u+w /tmp/bg

8. You suspect that a particular process is consuming excessive CPU resources on your Linux server. How would you identify and terminate this process?

Ans: - We can use `top` command to list all running processes sorted by CPU usage, then find the culprit by its process ID and use the `kill` command to kill it.